

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-27. (Cancelled)

28. (Original) A sensor comprising:

a sensor body; and

an active protein disposed within the sensor body, the active protein comprising glucose oxidase, human serum albumin, and a cross-linking reagent.

29. (Original) A sensor according to claim 28, wherein the active protein is hardened before it is disposed within the sensor body.

30. (Original) A sensor according to claim 28, wherein the cross-linking reagent is selected from a group consisting of glutaraldehyde, disuccinimidyl suberate (DSS), and 1-Ethyl-3 (3-Dimethylaminopropyl) Carbodiimide (EDC).

31. (Cancelled)

32. (New) A sensor according to claim 28, wherein the active protein is exposed to a non-liquid cross-linking process.

33. (New) A sensor according to claim 32, wherein the active protein is incubated prior to exposing the protein mixture to the non-liquid cross-linking process.

34. (New) A sensor according to claim 32, wherein the active protein is immersed in a cross-linking solution after exposing the protein solution to the non-liquid cross-linking process.

35. (New) A sensor according to claim 28, wherein the active protein is exposed to a vapor phase that is approximately 12.5% (w/w) glutaraldehyde for approximately 16 hours.

36. (New) A sensor according to claim 32, wherein the active protein is incubated by maintaining the protein mixture at approximately room temperature for approximately two hours prior to exposing the protein mixture to the non-liquid cross-linking process.

37. (New) A sensor according to claim 32, wherein the active protein is immersed in a cross-linking solution by submerging the protein mixture in a buffered solution that is approximately 2.5% (w/w) glutaraldehyde for approximately one hour after exposing the protein solution to the non-liquid cross-linking process.

38. (New) A sensor according to claim 28, wherein the cross-linking reagent is glutaraldehyde.

39. (New) A sensor according to claim 32, wherein the cross-linking reagent is glutaraldehyde.

40. (New) A sensor according to claim 28, wherein the cross-linking reagent is selected from a group consisting of glutaraldehyde, disuccinimidyl suberate (DSS), and 1-Ethyl-3 (3-Dimethylaminopropyl) Carbodiimide (EDC).

41. (New) A sensor according to claim 28, wherein the glucose oxidase has a concentration that is between approximately 67,000 U/ml and 150,000 U/ml.

42. (New) A sensor according to claim 41, wherein the human serum albumin has a concentration that is between approximately 23% (w/v) and 32.5% (w/v).

43. (New) A sensor according to claim 28, wherein the human serum albumin has a concentration that is between approximately 23% (w/v) and 32.5% (w/v).

44. (New) A sensor according to claim 28, wherein the active protein further comprises silicone.

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49. (New) A sensor according to claim 44, wherein the volume of the silicone particles is less than 20% of the volume of the active protein.

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50. (New) A hardened protein material for a sensor comprising:

a protein mixture combined with a cross-linking reagent;

wherein the combined protein mixture and cross-linking reagent is hardened into at least one pellet for disposing in a sensor.

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~~51~~. (New) A hardened protein material according to claim ⁴⁶~~50~~, wherein the protein mixture combined with a crosslinking reagent comprises a protein mixture exposed to a non-liquid cross-linking process.

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~~52~~. (New) A hardened protein material according to claim ⁴⁷~~51~~, wherein the protein mixture comprises a protein mixture which is incubated prior to exposing the protein mixture to the non-liquid cross-linking process.

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~~53~~. (New) A hardened protein material according to claim ⁴⁷~~51~~, wherein the protein mixture comprises a protein mixture which is immersed in a cross-linking solution after exposing the protein solution to the non-liquid cross-linking process.

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~~54~~. (New) A hardened protein material according to claim ⁴⁶~~50~~, wherein the protein mixture comprises a protein mixture which is exposed to a vapor phase that is approximately 12.5% (w/w) glutaraldehyde for approximately 16 hours.

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~~55~~. (New) A hardened protein material according to claim ⁴⁷~~51~~, wherein the protein mixture comprises a protein mixture which is incubated by maintaining the protein mixture at approximately room temperature for approximately two hours prior to exposing the protein mixture to the non-liquid cross-linking process.

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~~56~~. (New) A hardened protein material according to claim ⁴⁷~~51~~, wherein the protein mixture comprises a protein mixture which is immersed in a cross-linking solution by submerging the protein mixture in a buffered solution that is approximately 2.5% (w/w) glutaraldehyde for approximately one hour after exposing the protein solution to the non-liquid cross-linking process.

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~~57~~. (New) A hardened protein material according to claim ⁴⁶~~50~~, wherein the protein mixture comprises glucose oxidase and human serum albumin.

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~~58~~. ((New) A hardened protein material according to claim ⁴⁶~~50~~, wherein the cross-linking reagent is glutaraldehyde.

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~~59~~. (New) A hardened protein material according to claim ⁵³~~57~~, wherein the cross-linking reagent is glutaraldehyde.

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~~60~~. (New) A hardened protein material according to claim ⁴⁶~~50~~, wherein the cross-linking reagent is selected from a group consisting of glutaraldehyde, disuccinimidyl suberate (DSS), and 1-Ethyl-3 (3-Dimethylaminopropyl) Carbodiimide (EDC).

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~~61~~. (New) A hardened protein material according to claim ⁵³~~57~~, wherein the glucose oxidase has a concentration that is between approximately 67,000 U/ml and 150,000 U/ml.

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~~62~~. (New) A hardened protein material according to claim ⁵⁷~~61~~, wherein the human serum albumin has a concentration that is between approximately 23% (w/v) and 32.5% (w/v).

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~~63~~. (New) A hardened protein material according to claim ⁴⁶~~50~~, wherein the human serum albumin has a concentration that is between approximately 23% (w/v) and 32.5% (w/v).

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~~64~~. (New) A hardened protein material according to claim ⁴⁶~~50~~, wherein the at least one pellet is configured as at least one elongated rope-like structure.

⁶¹
~~65~~. (New) A hardened protein material according to claim ⁴⁶~~50~~, wherein the at least one pellet comprises an elongated rope-like structure cut into pieces.

⁶²
~~66~~. (New) A hardened protein material according to claim ⁶⁰~~64~~, wherein each elongated rope-like structure is semi-cylindrical.

⁶³
~~67~~. (New) A hardened protein material according to claim ⁴⁶~~50~~, wherein the protein mixture comprises a protein mixture in which silicone has been added.

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~~68~~. (New) A hardened protein material according to claim ⁴⁶~~50~~, wherein the volume of the silicone particles is less than 20% of the volume of the protein mixture.

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~~69~~. (New) An active protein for disposing in a sensor, the active protein comprising glucose oxidase, human serum albumin, and a cross-linking reagent.

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~~70~~. (New) An active protein as recited in claim ⁶⁵~~69~~, wherein the active protein is hardened into at least one pellet before disposing in the sensor.